

Reverse Billing On Circuit Switched Access (1083) *

Reverse Billing provides the ESP's client with the ability to make calls to the ESP without the ESP's client being billed for charges associated with the calls (e.g., message units, measured service charges, intraLATA toll), which might otherwise apply.

Generic Name of ONA Service	Product Name	BSE or CNS
Reverse Billing On Circuit Switched Access	BS - Uniform Access Number	BSE

FEATURE OPERATION:

The reverse billing feature provides the end user the ability to access the local Enhanced Service Provider (ESP) telephone number without incurring local message units or intraLATA toll. The Reverse Billing service is applicable to all calls terminating to an ESP's service provided the NPA/NXX for the ESP exists within the dial plan area.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE8A	5E2(2)	BCS17

2. For a voice grade line circuit switched application, reverse billing is a function of the billing systems. The technology to provide reverse billing is dependent on two systems- the central office where the call originates must have recording capability, and the billing systems must be able to process the billing information and reverse the billing to the terminating telephone number. In order to make the billing systems' tasks less complex, a unique NXX must be assigned for the reverse billing telephone numbers. The unique NXX indicates to the billing system that calls placed to numbers in this NXX must be treated differently than normal calls. The switching equipment in each LATA must have the capability to code convert all seven or ten digits of the unique NXX to facilitate completion of the call to the ESP.
3. References: not applicable.

This service is associated with the Circuit Switched Line basic serving arrangement.

* Note that this name has been changed slightly, and the description has been modified so that it no longer includes packet, compared to the information published in the May 24, 1989 BOC ONA Special Report #5 and December 29, 1989 BSA Matrix Supplement documents. For information on the packet version of this service, see the service called "Reverse Charge Acceptance Packet" in the packet services section of this document.

Selective Call Forwarding (1084)

Selective Call Forwarding (CLASSSM) allows the subscriber to specify a list of telephone numbers that will be forwarded to a remote station. When a call is received from one of the numbers on the list, the call will automatically be forwarded to the designated station. When a call is received from a number that is not on the list, the call will be terminated to the called party's line.

Generic Name of QNA Service	Product Name	BSE or CNS
Selective Call Forwarding	BA - Select Forward	CNS
	BS - Preferred Call Forwarding	CNS
	PH - Select Call Forwarding	CNS or BSE
	SWB - Selective Call Forwarding	CNS
	Qwest - Selective Call Forwarding	CNS

FEATURE OPERATION:

The customer must contact the telephone company to initiate Selective Call Forwarding service. A service order is required. The customer initiates control of the Selective Call Forwarding screening list contents as well as activation and deactivation of the service by dialing access codes as described below. Once the appropriate translations have been made to the customer's line the customer may activate, deactivate and/or use the service as follows. (Note: Prior to the 1A ESS 1AE10.2 generic, it was necessary for the 1A ESS Selective Call Forwarding customers to also subscribe to Call Forwarding Variable in order to activate the service.)

1. 1A ESS (Generic 1AE10.02 and later): To activate the Selective Call Forwarding service, the customer must go off-hook and dial *63 (1163 for rotary dial). The customer will then receive an announcement providing the following information:

- The name of the service.
- The telephone number the calls will be forwarded to.
- The service is now active.
- The number of entries on the list.
- The instructions for creating/adding to the list; removing subscriber's entries from the list; reviewing the list.

To deactivate the service, the customer must go off-hook and dial *83 (1183 for rotary dial). The customer will then receive an announcement providing the following information:

- The name of the service.
- The service is now off.
- The number of entries on the list.

— The instructions for removing any subscriber list entry; removing all subscriber entered numbers.

2. **5ESS and DMS-100:** To activate or deactivate the Selective Call Forwarding service, the customer must go off hook and dial either *63 or *83 (1163 or 1183 for rotary dial). Once either access code has been successfully entered, the customer should receive an announcement providing the following information:

The name of the service.

— The telephone number the calls will be forwarded to.

— The status of the service (active or inactive).

— The number of entries on the list.

The instructions for creating/adding to the list, removing, reviewing the list, changing of service status (active to inactive, inactive to active).

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE10*	5E6	BCS31**

NOTE: * Available on an intraoffice basis with 1AE9.

** References to switching system generics that have not yet been released by the vendors are based on our current information about which features are planned for inclusion in those generic releases. If the vendors change the availability of any features for future generic releases that are referenced in this document, the availability of some services may be affected.

2. The maximum directory number list size is pre-determined by the Local Exchange Company on a Company basis and can range from 2 to 31.
3. The serving central office switch must be equipped with the appropriate CLASSSM Selective Call Forwarding software and hardware. In order for this service to work on an interoffice basis, both the originating and terminating switches must be equipped with the CLASS and Common Channel Signaling (CCS) SS7 software and hardware and the interoffice trunks must be converted to SS7. The remote directory number ("forward to" number) does not have to be in a switch in the CLASS Calling Area or in a switch equipped with CLASS or SS7.
4. This service is a "line" service and therefore cannot be assigned to subscribers with trunk terminations (i.e., PBX with DID). This service is also unavailable to customers with the following types of lines: multiparty, hotel/motel, coin and coinless public, 1A ESS remote switching system lines (RSS), and Centrex attendant with console.
5. If the subscriber is served from a 1A ESS Generic 1AE10.02 and later switch, the subscriber no longer needs to have Call Forwarding Variable service in order for Selective Call Forwarding to work. However, even though the subscriber may have both Selective Call Forwarding (SCF) and Call Forwarding Variable (CFV) assigned to their line, they CANNOT have both services active at the same time. With the 1A ESS 1AE10.03 generic, the subscriber can have SCF and CFV services activated at the same time, if the Local Exchange Company equips their central offices accordingly.

6. References:

- GR-217 LSSGR: CLASSSM Feature: Selective Call Forwarding, FSD 01-02-1410 (A Module of LSSGR, FR-64), Issue 2, April 2002 (replaces TR-TSY-000217 Issue 2 & Revision 1 & Bulletin 2 & GR-217 Issue 1).
- GR-220 LSSGR: CLASSSM Feature: Screening List Editing, FSD 30-28-0000 (A Module of LSSGR, FR-64), Issue 2, April 2002 (replaces TR-WT-000220 Issue 3 & GR-220 Issue 1).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Selective Call Rejection (1085)

Selective Call Rejection (CLASS)SM provides the subscriber with the ability to block incoming calls from a pre-specified list of directory numbers. The subscriber to this feature builds a list of telephone numbers that they want automatically blocked. The pre-selected (blocked) directory numbers are routed to a standard central office announcement instead of the dialed number. Subscribers can also place the number of the last incoming call on their list, without having to know the telephone number, by dialing a special command code. However, this must be done PRIOR to receiving another call.

Generic Name of ONA Service	Product Name	BSE or CNS
Selective Call Rejection	AM - Call Screening	CNS
	BA - Call Block	CNS
	BS - Call Block	CNS
	PB - Call Block	CNS or BSE
	SWB - Call Blocker SM	CNS
	Qwest - Call Rejection	CNS

FEATURE OPERATION:

The customer must contact the local telephone company to initiate Selective Call Rejection service. A service order is required. The customer initiates control of the Selective Call Rejection screening list contents as well as activation and deactivation of the service by dialing access codes as described below. Once the appropriate translations have been made to the customer's line the customer may activate, deactivate and/or use the service as follows.

1. 1A ESS: To activate the Selective Call Rejection service, the customer must go offhook and dial *60 (1160 for rotary dial). The customer will then receive an announcement providing the following information:

- The name of the service.
- The service is now active.
- The number of entries on the list.

- The instructions for adding the last incoming number to the list, adding known numbers to the list; removing subscriber entries from the list; reviewing the list.

To deactivate the service, the customer must go offhook and dial *80 (1180 for rotary dial). The customer will then receive an announcement providing the following information:

- The name of the service.
- The service is now off.

SM CLASS is a service mark of Telcordia Technologies, Inc. (formerly Bellcore)

SM Call Blocker is a service mark of Southwestern Bell Telephone.

- The number of entries on the list.
 - The instructions for removing any subscriber list entry; removing all subscriber entered numbers.
2. **5ESS and DMS-100:** To activate or deactivate the Selective Call Rejection service, the customer must go off-hook and dial either *60 or *80 (1160 or 1180 for rotary dial). Once either access code has been successfully entered, the customer should receive an announcement providing the following information:
- The name of the service.
 - The status of the service (active or inactive).
 - The number of entries on the list.
 - The instructions for adding the last incoming number to the list, adding removing, reviewing the list, changing of service status (active to inactive, inactive to active).

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE10*	5E6	BCS31**

NOTE: * Available on an intraoffice basis with 1AE9.

** References to switching system generics that have not yet been released by the vendors are based on our current information about which features are planned for inclusion in those generic releases. If the vendors change the availability of any features for future generic releases that are referenced in this document, the availability of some services may be affected.

2. The maximum list size is pre-determined by the telephone company on a company basis and can range from 2 to 31.
3. The serving central office switch must be equipped with the appropriate CLASSSM Selective Call Rejection software and hardware. In order for this service to work on an interoffice basis, both the originating and terminating switches must be equipped with the CLASSSM and Common Channel Signaling (CCS) SS7 software and hardware and the interoffice trunks must be converted to SS7.
4. This service is a "line" service and therefore cannot be assigned to subscribers with trunk terminations (i.e., PBX with DID). This service is also unavailable to customers with the following types of lines: multiparty, hotel/motel, coin and coinless public, 1A ESS remote switching system lines (RSS), and Centrex attendant with console.
5. The announcement the rejected call is routed to is a telephone company recorded announcement (not customer changeable).

6. References:

- GR-218 LSSGR: CLASSSM Feature: Selective Call Rejection, FSD 01-02-0760 (A Module of LSSGR, FR-64). Issue 2, April 2002 (replaces TR-TSY-000218 Issue 2 & Revision 1 & Bulletin 2 & GR-218 Issue 1).
- GR-220 LSSGR: CLASSSM Feature: Screening List Editing, FSD 30-28-0000 (A Module of LSSGR, FR-64). Issue 2, April 2002 (replaces TR-NWT-000220 Issue 3 & GR-220 Issue 1).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Shared Speed Calling (1086)

Shared Speed Calling will permit an ESP's clients to access a speed calling list and to call an ESP by dialing only one (or two) digit(s) instead of seven or ten digits. The ESP controls the speed calling list and determines which telephone numbers that the clients will be able to access via shared speed calling as well as the abbreviated code assigned to each number. The ESP must order the service from the BOC before an ESP client can have access to the shared speed calling list. This is due to a technological requirement of the service design that requires that each ESP's client's line be associated in the switch software with the ESP-established list.

This service differs from Speed Calling in that it allows multiple customers (ESP clients) to easily and conveniently access their ESPs without the need for each ESP client to individually subscribe to Speed Calling on their line. Speed Calling is unique to individual customer lines and the telephone numbers associated with each abbreviated code on the list are determined by the individual subscriber to the service. As with Speed Calling, Shared Speed Calling is available using either one or two digit abbreviated codes. One digit allows one to eight abbreviated codes while two digit allows one to thirty abbreviated codes.

Generic Name of ONA Service	Product Name	BSE or CNS
Shared Speed Calling	BA - Shared Speed Calling	CNS
	PB - Network Speed Calling	CNS
	Qwest - Abbreviated Access/Activation (1 or 2 Digit)	CNS

FEATURE OPERATION:

1. To call any of the directory numbers assigned to a Shared Speed Call list the ESP or their clients perform the following operations:
 - a. Listen for dial tone.
 - b. Dial the one or two digit Shared Speed Call code assigned to the desired directory number or destination. After a four-second pause, the call is processed. (Callers from touchtone telephones can avoid the four-second pause by dialing # after the Speed Call code.)
2. To change any numbers or to add a number to the Shared Speed Call list, the following operations are performed by the ESP from their line:
 1. Listen for dial tone.
 2. Dial the applicable Shared Speed Call change code (typically three or four digits).
 3. After receipt of second dial tone, dial the Shared Speed Call code that is changing or being added and then dial the new directory number associated with the Shared Speed Call code. (If a fast busy tone is encountered the action must be repeated because the change did not occur.)

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. Only the ESP can control (i.e., change or add to) the list. The ESP must have an access line in the Central Office switch where the Shared Speed Call list is established. All clients must be in this same Central Office switch.
2. This feature is available to POTS subscribers in the following central office switches:

Switch Type	1A ESS	5ESS
Earliest Generic Release	1AE8A	5E2(2)

3. The capability may be limited to certain POTS classes of service. It is generally available to Centrex subscribers in all types of Central office switches offering Centrex service.
4. The maximum number of digits in the telephone number assigned to the Shared Speed Call code is 15 in the 1A ESS and 32 in the 5ESS.
5. Multiline subscribers can have Shared Speed Calling on each line if desired.
6. Shared Speed Calling can be used in conjunction with Three-Way Calling or Three-Way Call Transfer if the subscriber wishes to add to an established call someone who is on their Shared Speed Call list.
7. Subscribers with Shared Speed Calling (one-digit) can also have Speed Calling (two-digit) or Speed Calling (thirty number) on the same line. Subscribers with Shared Speed Calling (two-digit) can also have Shared Speed Calling (one-digit) or Speed Calling (eight number) on the same line.
8. References:
 - GR-570 LSSGR: Speed Calling, FSD 01-02-1101 (A Module of LSSGR, FR-64), Issue 1, June 2000, see "Shared Speed Calling" (replaces TR-TSY-000570 Issue 1 – no technical changes).

Single Number Access For Multiple Locations (1098)

Single Number Access for Multiple Locations allows subscribers with multiple locations to advertise a single 7-digit telephone number LATAwide. Calls to the subscriber's number are routed to the most appropriate location based on subscriber-selected parameters, such as originating geographic location, time-of-day, day-of-week, or percent distribution of calls.

Generic Name of ONA Service	Product Name	BSE or CNS
Single Number Access for Multiple Locations	BS – ZipCONNECT (Area Number Calling) *	CNS

FEATURE OPERATION:

Subscribers desiring the Single Number Access for Multiple Locations service must contact the telephone company to have the service established. They are assigned a 7-digit number in an NXX code dedicated for this service. Calls originating to the dedicated NXX are recognized as requiring special handling. AIN Release 0 offices send a query to the service control point (SCP) which determines the "real" (local telephone network number) terminating number based on the number dialed and the parameters selected by the subscriber. This information is transmitted back to the querying office, which uses the "real" terminating number to route the call. If the call originates in an office that is not AIN Release 0 capable but is SS7 capable, then the call, including the calling number, is routed to an office that can perform the SCP query and route the call. If the originating office is neither AIN Release 0 nor SS7 capable, it is routed to an AIN capable office without the calling number and treated as agreed upon by the telephone company and the subscriber.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	See Note	SE8	BCS35

Note: A 1A ESS cannot access the SCP to translate the call, but if it is equipped with IAB10 and SS7 capability, it can route the call to a 5ESS or DMS-100 for handling.

2. Feature operation is dependent on the type of central office switch in which the call originates, not the switch type that the subscriber is served by.
3. Calls are dialed on a 7-digit basis throughout the LATA. If toll charges are involved (if the 7-digit number is translated to a 10-digit intraLATA toll number), they are billed as agreed to by the telephone company and the subscriber.
4. Geographic routing will allow calls to be routed based on originating wire center, or on originating block group boundaries. Block groups are based on the U. S. Census Bureau-based geographical coordinates, and will allow subscribers to design their own service areas below the wire center level.

* Service is only available to existing BellSouth subscribers. This offering will be removed in Florida by July 2003, and will be grandfathered in the other 8 states. The FCC has been requested (in 2002) to approve discontinuance of this service. Once all customers are removed and upon FCC approval, all tariffs will be deleted as appropriate.

5. Time-of-Day routing is based on the time the originating call is made.
6. Day-of-Week routing is based on which day of the week the calls are made.
7. Percent distribution routing allows the subscriber to distribute the call volumes going to each location, i.e., 20% to Location A, 30% to Location B, etc.
8. Default treatment will be specified for calls not mapped to a particular location, such as out of area calls, and calls without calling line identification delivered with the call.
9. Reference: Not available.

Speed Calling (1087)

Speed Calling (eight number) allows a subscriber to establish a connection to certain directory numbers by dialing one digit instead of seven to ten digits. The service has a limit of eight speed calling access codes (each single digit code is associated with a telephone number).

Speed Calling (thirty number) allows a subscriber to establish a connection to certain directory numbers by dialing two digits instead of seven to ten digits. The service has a limit of 30 speed calling access codes (each two digit code is associated with a telephone number).

The telephone numbers associated with access codes of a speed call list are determined by the client. The client has the ability to add or change the telephone numbers assigned to such codes through use of the client's station.

Generic Name of ONA Service	Product Name	BSE or CNS
Speed Calling	AM - Speed Calling	CNS
	BA - Speed Calling	CNS
	BA - Speed Dialing	CNS
	BS - Speed Calling	CNS
	NX - Speed Calling	CNS
	PB - Speed Calling (8 & 30 Number)	CNS
	SWB - Speed Calling	CNS
	Qwest - Speed Calling (8 Number)	CNS
	Qwest - Speed Calling (30 Number)	CNS

FEATURE OPERATION:

1. To call any of the directory numbers assigned to a Speed Call list, the subscriber performs the following operations:
 1. Listen for dial tone.
 2. Dial the one or two-digit Speed Call code assigned to the desired directory number. After a four-second pause, the call is processed. (Callers from touchtone telephones can avoid the four-second pause by dialing # after the Speed Call code.)
2. To change any numbers or to add a number to the Speed Call list, the following operations are performed from the subscriber's line:
 - a. Listen for dial tone.
 - b. Dial the applicable Speed Call change code (typically three or four digits).
 - c. After receipt of second dial tone, dial the Speed Call code that is changing or being added and then dial the new directory number associated with the Speed Call code. (If a fast busy tone is encountered the action must be repeated because the change did not occur.)

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE8A	5E2(2)	BCS17

2. The maximum number of digits in the telephone number assigned to the Speed Call code is 15 in the 1A ESS, 32 in the 5ESS and 15 in the DMS-100.
3. Multiline subscribers can have Speed Calling on each line if desired.
4. Speed Calling can be used in conjunction with Three-Way Calling or Three-Way Call Transfer if the subscriber wishes to add to an established call someone who is on their Speed Call list.
5. Subscribers with Speed Calling (eight-number) can also have Speed Calling (thirty-number) Shared Speed Calling (two-digit) on the same line. Subscribers with Speed Calling (thirty-number) can also have Speed Calling (eight-number) Shared Speed Calling (one-digit) on the same line.
6. References:
 - GR-570 LSSGR: Speed Calling, FSD 01-02-1101 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000570 Issue 1 – no technical changes).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Tandem Routing (1088)

Tandem Routing provides for access by ESPs to the exchange network with trunk and/or line interfaces through tandem switches. This allows ESPs to interconnect with the network at a single point and be accessed by customers in a selected group of end offices, all of which subtend that tandem. In some jurisdictions, at the option of the ESP, calls from a particular end office may be blocked or forwarded to the ESP, allowing the ESP to create a custom services area from the LATA sector served by the tandem.

Generic Name of ONA Service	Product Name	BSE or CNS
Tandem Routing	AM - Tandem Routing	BSA *
	BA - Tandem Routing	BSE
	BS - Custom Service Areas	BSE
	NX - Tandem Routing	BSA *
	PB - Tandem Routing	BSA *
	Qwest - Tandem Routing	BSA **

FEATURE OPERATION:

Tandem translations supply data for routing calls over tandem trunks. Tandem trunks that are incoming from a tandem office or central office cannot terminate at a line or tone circuit in a local office, with the exception of a connection to reorder tone when all outgoing trunks are busy or a network blockage occurs. Instead, these trunks are switched to tandem completing trunks that are outgoing to a local office.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE8A	5E2(2)	BCS19

2. All three switch types require specific generic software to configure the switch for tandem operation. An example of this is the Northern Telecom NTX386AA feature package, used in the DMS 100/200 to configure this switch for Access Tandem capabilities. This feature package enables access tandem translations and screening, trunking, treatments, and billing as well as various software support features. Because all offices do not contain the necessary feature packages for tandem trunking, the local exchange company must be contacted for specific geographic locations of the switches with this capability.

* For Ameritech, NYNEX, and Pacific Bell, this is met by an alternative of the Circuit Switched Trunk BSA.

** Per the FCC's Waiver Order, "In the Matter of Amendments of Part 69 of the Commission's Rules Relating to the Creation of Access Charge Subelements for Open Network Architecture; Filing and Review of Open Network Architecture Plans, DA 92120", released January 31, 1992, Qwest was granted a waiver of offering this service.

3. In some regional companies, this service may be limited to trunk side access services utilizing Feature Groups B and D protocol, or Feature Group D protocol only.

4. References:

- GR-540 LSSGR: Tandem Supplement (A Module of LSSGR, FR-64), Issue 2, March 1999 (Replaces TR-TSY-000540, Issue 2).

This service, if offered as a BSE, is associated with the Circuit Switched Trunk basic serving arrangement.

Three Way Call Transfer (1089)

Three Way Call Transfer provides the ESP who is on an established call with the ability to add another party to perform a three way conference. After establishing the conference, the ESP may drop their connection without disconnecting the remaining two parties. This action allows the ESP to transfer specific calls and free their line to initiate or receive another call.

Generic Name of ONA Service	Product Name	BSE or CNS
Three Way Call Transfer	AM - Three Way Call Transfer	BSE
	BA - Three-Way Call Transfer	BSE
	BA - Three Way Calling	BSE
	BS - User Transfer	BSE or CNS
	NX - Three Way Call	BSE
	PB - Call Transfer	BSE
	Qwest - Call Transfer	BSE

FEATURE OPERATION:

1. To transfer an established call: Advise first party, then depress the receiver button (recall dial tone is heard); dial number of the third party (hear ringing); announce the call, depress the receiver button to add on the first party, then hang up.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AESSA*	5ES*	BCS29

* Note that on the 1A ESS and 5ESS, this is made available by placing customers in a Centrex Common Block.

2. An additional option for the ESP with Centrex is to allow calls to be transferred outside of the Centrex environment. This optional feature is known as DID/DOD Transfer.
3. Call Forwarding Variable is compatible with Three Way Call Transfer service.
4. Call Hold and Three Way Call Transfer can be assigned to the same line.
5. Call Pickup and Three Way Call Transfer can be assigned to the same line.
6. Speed Calling and Three Way Call Transfer can be assigned to the same line.
7. Three Way Call Transfer may be assigned to either or both parties on a Two-Party Line.

8. Three Way Call Transfer may not be provided on the following lines:

- Coin Lines
- Denied Originating Lines
- Four and Eight Party Lines
- PBX Lines
- Hotel/Motel Calls Routed to TSPS

9. References:

- GR-579 LSSGR: Add-On Transfer and Conference Calling Features, FSD 01-02-1305 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000579 Issue 1 – no technical changes).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Uniform 7 Digit Access Number - Remote Call Forwarding (1090)

This capability provides a uniform seven-digit telephone number which can be dialed without an NPA prefix and is remotely call forwarded to an ESP, thereby giving an appearance of a local presence. The subscriber (ESP) may pay all end user customer usage charges and can specify a custom routing arrangement with either a central location or multiple locations throughout a LATA.

This capability uses Remote Call Forwarding technology, simulated facility groups and a dedicated NXX code. Custom Routing is an added feature.

Generic Name of ONA Service	Product Name	BSE or CNS
Uniform 7 Digit Access Number - Remote Call Forwarding	BA - One Number Service	BSE
	BA - Remote Call Forwarding	BSE

FEATURE OPERATION:

To reach a subscriber, a client dials the seven digit number assigned by the telephone company. The call is routed to the central office switch where the translations for the capability reside. From there the call is directed to the destination specified by the subscriber. The number of simultaneous calls that can be directed to a destination is controlled by a Simulated Facility Group. Calls are completed via the Public Switched Network.

To reach a subscriber with Custom Routing, a client dials the seven digit number assigned by the telephone company. The call is translated in the originating switch and directed to the destination specified by the subscriber. Since the translations are done in each originating switch, each switch can direct calls to a different destination. A Simulated Facilities Group is established in each end office switch with Custom Routing to limit the number of simultaneous calls that can be forwarded from that switch. Calls originating in switches without translations for this capability are routed to an announcement. Calls are completed via the Public Switched Network.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1A E8A	5E2(2)	BCS19

2. To establish this capability and to change an established arrangement for this capability requires a service order.
3. Subscribers desiring the Custom Routing option must specify the central office switches they wish to serve. Calls originating in an area that has not been designated as part of a Custom Routing area will receive a vacant code announcement.

4. References:

- Reference for Remote Call Forwarding: GR-581 LSSGR: Remote Call Forwarding, FSD 01-02-1402 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000581 Issue 1 – no technical changes).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Uniform 7 Digit Access Number via Overlay Networking (1091)

This feature provides the ESP with a uniform 7 digit directory number for use (for example) across a LATA, state or regional company. The clients will be able to dial one number from all locations within the specified area(s), and the calls will be routed to a specified ESP location within each LATA. Uniform Access Number is the ability of an ESP to use the same 7 digit telephone number in multiple service areas, possibly regionwide. All numbers used in Uniform Access Number will come from an NXX (or NXXs) especially designated for ESP use.

Generic Name of ONA Service	Product Name	BSE or CNS
Uniform 7 Digit Access Number via Overlay Networking	BS - Uniform Access Numbers for Business Lines	BSE
	NX - 900 Access Service	BSE

FEATURE OPERATION:

The feature is supported by trunking architecture that could include direct and tandem switching center routing to the called ESP. Future routing plans will include Common Channel Signaling (SS7) technology.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. No specific vendor software or features are required. Specific telephone company architecture, capabilities and operation could vary.
2. References:
 - No requirements reference available.

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Warm Line (1092)

The warm line capability is a Central Office switch based automatic dialing feature.

If an ESP's client with a warm line capability goes offhook and commences dialing within the time delay period, the call will proceed normally as dialed. If dialing has not started before the end of the time delay period, a stored number is automatically dialed.

Generic Name of ONA Service	Product Name	BSE or CNS
Warm Line	AM - Easy Call	CNS
	BA - Warm Line	CNS
	BS - Warm Line	CNS
	NX - Warm Line	BSE or CNS
	PB - Warm Line	CNS
	SWB - Warm Line	CNS
	Qwest - Warm Line	CNS

FEATURE OPERATION:

1. A subscriber of this service, upon going offhook to initiate an outgoing call has the option to either:
 - a. Dial the call in the normal manner or
 - b. Wait for the prespecified time delay period and have the call automatically dialed to a single predetermined number or
 - c. If calling from a touchtone phone, dial the # to immediately activate the automatic dialing.
2. The service, including the time delay interval and the predetermined number, is initially activated via a service order with the telephone company.
3. Subsequent changes to the time delay interval may only be made via a telephone company service order. Changes to the predetermined number may be made via a telephone company service order or, as an option, be made from the subscriber's line in the following manner:
 - a. Listen for dial tone.
 - b. Dial a telephone company assigned update code and receive second dial tone after a four second pause (subscribers with touchtone lines can avoid this pause by dialing # after the update code).
 - c. Dial the new number. After a short time-out period, the new number will be active.

If the above-described option is available, the service can be deactivated by following the same procedure but not dialing in a new number. To reactivate the service, the subscriber would again follow the above-described procedure and must re-enter the predetermined number.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	DMS-100
Earliest Generic Release	BCS17

2. The predetermined telephone number can be any number normally dialable from the subscriber's line.
3. The time delay period is specified on a per line basis and can range from 0 to 20 seconds (a usual value would be 4 or 5 seconds).
4. Incoming calls are unaffected by this service.
5. A line with this service cannot have Hot Line service.
6. Warm Line can be used in conjunction with Three Way Calling or Three Way Call Transfer if the subscriber wishes to add the predetermined number to an established call.
7. No USSGR reference available.

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

2. Technical Descriptions for Packet Switched Serving Arrangements

Call Detail Recording Reports (Packet) (1003)

This service will provide the ESP with a data record of all calls made to their telephone number. The record will include called and calling NTN (Network Terminal Number), date, time of day, number of segments and the duration of the call.

The call details will not be delivered in real time, but as a paper or magnetic tape output. The technology to provide Call Detail Recording is resident in two systems: first, the packet switch where the call originates must have recording capability; and second, the BOC's data processing system must be able to sort the recording information and extract the call details on calls made to the ESP's called number.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Detail Recording Reports (Packet)	BA - Monthly Detailed Connection File	BSE
	NX - Call Detail Recording Reports-Packet	BSE or CNS
	PB - Call Detail Recording Reports	*
	SWB - Reports	BSE
	Qwest - Access Service Calling Information	BSE

FEATURE OPERATION:

See above description.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

- Two reports may be provided either as paper or magnetic tape output, the Summary Report or the Detailed Report. The two reports may be sorted by three key elements:
 - NUI - Network User Identification
 - Calling NTN (Network Terminal Number)
 - Called NTN (Network Terminal Number)
- The actual information and report format may vary by company.
- References:
 - * GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

* Pacific Bell does not consider "paper or magnetic tape output" as a Basic Service Element. Pacific Bell does and will continue to provide call detail information to its customers.

Call Redirection - Packet (1004)

Call Redirection is an optional intraLATA Public Packet Switched Network (PPSN) feature that allows the network to automatically redirect calls to a predefined backup DTE (Data Terminal Equipment) under specified conditions. The primary DTE may designate a list of secondary DTEs called a backup list. The network may be able to search the list in sequence until a connection can be established.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Redirection - Packet	AM - Call Redirection	BSE
	BA - Call Redirection	BSE
	BA - Custom Redirection	BSE
	BS - Call Redirection	BSE or CNS
	NX - Call Redirect	BSE or CNS
	PB - DTE Backup	BSE
	SWB - Packet Call Redirection	BSE
	Qwest - Backup/Redirection	BSE

FEATURE OPERATION:

The PPSN will provide the calling clients DTE/CPE with the address and reason for redirection of the call to a secondary DTE. The network will also provide the secondary DTE with data in the incoming call packet as to why the call was forwarded and the address of the primary DTE.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. The Packet Switch, Access Concentrator or ISDN Packet Handling Function should support X.25 direct access interface.
2. LEC ISDN interface to PPSN should support recommendation X.75¹ of the International Telecommunication Union-Telecommunication Standardization Sector (ITU-TS) [formerly CCITT].
3. PPSN supports both individual and hunt group DTE access. Call Redirection applies to all addresses associated with subscriber access.
4. Call Redirection is limited to interfaces within a single LATA.
5. References:
 - GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).
 - TR-NWT-001249, X.25 Call Redirection and Call Deflection Generic Requirements, Issue 1, December 1992. [No longer listed.]

This service, if offered as a BSE, may be associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Closed User Groups - Packet (1005)

Closed User Group (CUG) is a Public Packet Switched Network feature that controls communication between Data Terminal Equipment (DTEs) belonging to the same CUG. Various CUG feature options are designated by the user such as:

- Incoming Calls Barred With CUG, allows a member of a CUG to originate calls to other members of the CUG, but cannot receive incoming calls.
- CUG With Incoming Access, allows a member of a CUG to receive incoming calls from any DTE not in the CUG.
- Outgoing Calls Barred With CUG, allows a member of a CUG to receive calls from other members of that CUG, but cannot originate any calls.
- CUG With Outgoing Access, allows a member of a CUG to make outgoing calls to any DTE.

A DTE can be a member of more than one CUG.

Generic Name of ONA Service	Product Name	BSE or CNS
Closed User Groups - Packet	AM - Closed User Group	BSE
	AM - Closed User Group	CNS
	BA - Closed User Group	BSE or CNS
	BS - Closed User Group	BSE or CNS
	NX - Closed User Group	BSE or CNS
	PB - Closed User Group	BSE
	SWB - Closed User Group	BSE
	Qwest - Closed User Group	BSE

FEATURE OPERATION:

Closed User Groups provide a mechanism for controlling communication that is defined by the client/user when the service is requested. A preferential CUG may be chosen at subscription and the preferential CUG will automatically be selected if a specific CUG is not designated in the call request packet. Screening of the CUG may be performed at the originating and terminating interfaces as well as the PPSN X.75 interface. The call request is cleared if found invalid at any screening point.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. The PPSN and ISDN Packet Handling Facility (PHF) should be capable of supporting more than 100 CUGs on an X.25 interface.
2. The PPSN Access Concentrator should be capable of supporting up to 10 CUGs on an X.25 interface.
3. The PPSN X.75 interface should support 100 CUG codes.